Security Dilemma in South Asia: Building Arsenals and Living with Distrust

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Abstract

India and Pakistan are engaged in a subtle strategic competition and a gradual arms race where technological innovations, military modernizations, and growing nuclear arsenals are raising the stakes for stability. India's military investment is driven by a strategic rivalry with China, but the pace of development finds Pakistan increasingly vulnerable to exploitation; to reduce the level of disparity, Pakistan turns to China, and though willing and able to bolster Pakistan's strategic capability, the assistance is not enough to enable Pakistan to meet multiple conventional force contingencies. Islamabad therefore depends even more on nuclear weapons to offset its force imbalance with India. In this classic security dilemma, where competition is intensifying and mutual distrust is swelling, the potential for an outbreak of military crisis in South Asia is increasing. The situation demands a structured peace and security architecture to initiate détente and ensure stability between the two nuclear-armed neighbors. Without such an agreement, the consequences of an unchecked India-Pakistan security competition could reverberate beyond South Asia into the Asia- Pacific and Middle East regions.

Resumo

O Dilema de Segurança no Sul da Ásia: Reforçando Arsenais e Vivendo com a Desconfiança

A Índia e o Paquistão estão envolvidos numa subtil competição estratégica e numa gradual corrida de armamentos onde inovações tecnológicas, modernizações militares e crescentes arsenais nucleares aumentam os riscos para a estabilidade. O investimento militar indiano é alimentado pela rivalidade estratégica com a China mas o ritmo de desenvolvimento torna o Paquistão crescentemente vulnerável; para reduzir o nível de disparidade, o Paquistão vira-se para a China – apesar desta estar disponível e ser capaz de aumentar a capacidade estratégica paquistanesa – esta assistência não é suficiente para permitir ao Paquistão lidar com as diversas contingências das forças convencionais. Desta forma, Islamabad depende cada vez mais das armas nucleares para contrabalançar os desequilíbrios de forças com a Índia. Neste dilema de segurança clássico, onde a competição se intensifica e desconfiança mútua aumenta, o potencial para a emergência de uma crise militar no Sul da Ásia aumenta. A situação pede uma paz estrutural e uma arquitetura de segurança para iniciar uma *détente* e garantir uma estabilidade entre dois vizinhos com armas nucleares. Na ausência de tal acordo, as consequências de uma competição securitária Índia-Paquistão sem restrições podem ir além do Sul da Ásia e afetar as regiões do Médio Oriente e Ásia-Pacífico.

Introduction

The strategic picture in South Asia remains grim and worrisome. Nearly 17 years have passed since India and Pakistan overtly displayed their nuclear capability to each other and the world, yet stability or a détente between the two neighbors remains elusive. Rather than pursue lasting peace, India and Pakistan have become hostage to negative perceptions and melodramatic fixations that have exacerbated a regional security competition.[1]

Faced with series of international sanctions and diplomatic isolation in the wake of the 1998 nuclear tests, India and Pakistan assured the world that they would each pursue a minimum deterrence posture, avoid a debilitating arms competition, and take steps behooving of responsible nuclear stewardship. The international community believed, as did the domestic audience in both states, that the benefit of nuclear weapons in South Asia was to dissuade and deter conflict and enforce an Indo-Pakistani détente.

In contrast to that vision, mutual mistrust has deepened in both capitals despite the establishment of operational nuclear deterrents. Kashmir remains unresolved and a flashpoint for conflict, and the rise of religious extremism is reaching dangerous levels. Pakistan in particular is facing a grim situation; terrorists target not just the state institutions and military within the country, but have also struck repeatedly in India and Afghanistan.[2] Acts of terrorism have brought several times India and Pakistan to the brink of war as allegations of Pakistan's sponsorship for the acts have been levied by India.[3] Equally, Pakistan alleges India's abetment of insurgency in Pakistan's Baluchistan province, where a secessionist movement has increased in fervor and violence.

Individually, each struggles with its own issues. India is a rising power that seeks parity with its mightier neighbor China, even though it has been unable to resolve conflicts with its immediate neighbors—especially Pakistan. Meanwhile, Pakistan endures both political instability and violent extremism that has metastasized aggressively in the past few decades. Pakistan also competes with India while balancing the cost of building-up strategic arsenals against the persistent threat of military contingencies on its borders with India and Afghanistan.

1 This essay contains author's personal views and does not represent U.S. Department of Defense, the Naval Postgraduate School (NPS) or the Pakistani government.

2 At the time of this writing, a major terror attack on an Army Public School that killed innocent school children has resulted into an unprecedented resolve in the country to deal with the scourge of terrorism and violent extremism.

3 In 2001–02, attacks on India parliament building and in November 2008 a daring terror assault in several locations in Mumbai was allegedly traced back to Pakistani territory which precipitated major military crises.

The security competition between the two has lately intensified into a true nuclear arms race. India and Pakistan are both expanding fissile material production and introducing a suite of new nuclear-capable delivery systems, such as short-range battlefield nuclear weapons, sea-based variants, and higher-ranging ballistic missiles.[4] Nuclear force developments and increased military procurements by both are not expected to lessen anytime in the foreseeable future, an eventuality that will only worsen the Indo-Pakistani mistrust in the coming years. In sum, after nearly seven decades of enduring rivalry, India and Pakistan are embroiled in a self-perpetuating vortex of security competition that is driving South Asia closer to the brink of a nuclear conflict.

Outside of this regional stability dilemma, global power politics has recently shifted to three distinct regions: the Asia-Pacific, as United States "pivots" to the Far East; the Middle East, where violent extremist threats such as *Daish*, or Islamic State in Levant (ISIL), have emerged to compete for recruitment and terrorist hegemony with established groups like Al-Qaeda; and the Crimea/Ukraine region, where Russia has reasserted its muscle, resulting in a major crisis in 2014.

These tensions at the global system level are likely to have trickle-down effects in South Asia; in particular, the Asia-Pacific rebalance will inadvertently incentivize the Indo-Pakistani nuclear arsenal race. As China increases its defense spending in response to America's pivot to Asia, India is consequently driven to develop and modernize its own strategic and conventional forces, including *Agni* intermediate-range ballistic missiles (IRBMs) and *Sagarika* submarine-launched ballistic missiles (SLBMs). The reverberations of these actions continue as Western powers, encouraging strategic congruity with "containing" China's rise, feed India's strategic ambition and tacitly endorse India's military modernization and nuclear proliferation activities.

This policy is creating a classic security dilemma: India's military's investment finds Pakistan increasingly vulnerable to exploitation; Pakistan turns to China, which responds by bolstering Pakistan's strategic capability, but still lacking the resources to compete with India's conventional military advantage, Islamabad depends even more on nuclear weapons to offset the imbalance.

For nearly four decades, India and Pakistan have defied global norms and the nonproliferation regime. Both states openly challenged this international commitment to reduce the existence of nuclear weapons by overtly demonstrating their

4 Since the 1998 nuclear tests, Pakistan has introduced eight nuclear-capable delivery systems, and India has responded with nine of its own. For both sides, missiles are becoming faster, deadlier, and more precise. Pakistan is improving its uranium extraction technology, boosting its fissile material production rates. Nuclear forces are moving to sea, by way of missile submarines, for example the INS *Arihant*. In addition, Indian ballistic missile defenses are coming online.

respective nuclear capabilities in 1998. Since then, both countries have been developing operational deterrence force postures, new doctrines, and improved command and control systems, and soon, both countries will complete the third leg of the nuclear "triad" by fielding sea-based delivery systems. In a recent edited volume, a well-known and widely respected South Asian scholar, Michael Krepon, states that India and Pakistan now possess more nuclear weapons delivery vehicles - including families of cruise and ballistic missiles - than the United States and Russia (Krepon, 2013: 9).

On its part, the international community in the past, and especially in the wake of the 1998 tests, had explicitly desired to avoid an unhealthy arms race between India and Pakistan. But there never was any visible involvement of major powers to prevent the upward spiral of India-Pakistan nuclear postures.

More recently, however, Western governments have displayed a different attitude towards South Asian nuclear capability. This is evidenced by the lucrative nuclear cooperation deal that was offered to India by the United States. Problematically, the denial of the same deal to Pakistan, the other nuclear weapons capable nation, left the region with little incentive to resolve conflicts. The mixed messages sent by the international community to the two nations, locked in a fully developed nuclear arms race, add yet another layer to the instability dilemma in South Asia. Integrating the two states (and Israel) into the global non-proliferation regime is crucial for regional security and long-term international security in the 21st century.

This paper has three sections. The first section gives an overview and assessment of the trajectories of South Asia's strategic postures. The second examines the geographical asymmetries as well as the evolving doctrines and its impact on command systems. The final section analyses the political and security dynamics that are causing tension and generating military competition. Finally, this paper concludes by offering some suggestions that could set stage for eventual peace and détente.

An Assessment of Strategic Trajectories in South Asia

India carried out its first nuclear device test in 1974, dubbing it "Smiling Buddha." New Delhi's characterization of this nuclear test as a "peaceful nuclear explosion" had few believers—especially across the border in Pakistan. After suffering defeat in the Bangladesh war, Pakistan, under the direction of President Zulfiqar Ali Bhutto, began an uncompromising pursuit of the nuclear bomb. Faced with stiff resistance from Western nuclear technology suppliers and legal obstacles from an emerging non-proliferation regime, Pakistan resorted to procuring essential nuclear components by any means, legitimate, or illicit.[5]

5 A comprehensive history of Pakistani nuclear program is covered in Feroz Hassan Khan (2012). *Eating Grass: The Making of the Pakistani Bomb*. Stanford: Stanford University Press.

For the next quarter of century, India and Pakistan produced fissile material and developed delivery capability at a steady pace. Both denied existence of a military nuclear program until 1998 when each conducted nuclear explosive tests and declared themselves as nuclear capable states. As the new century dawned, both states had a few dozen weapons in their inventory, although operational employment capability was nascent at best. Within a year of the tests, however, India and Pakistan were involved in a short war on the Line of Control (LoC) in the northern areas of the disputed Kashmir region (Kargil Crisis). Like other engagements in the past, this military crisis was eventually diffused through U.S. diplomatic intervention but not until after an intense short battle that caused hundreds of casualties. This unfortunate short war gave birth to innovative military doctrines and set South Asia on a pathway of adversarial policy and further crises.[6]

In the first decade after nuclear tests, the region saw unprecedented acts of terrorism and more military crises. During the same period, international focus on South Asia intensified after the September 11, 2001 terror attack in the United States. U.S. and NATO forces became deeply mired in military operations in Afghanistan as part of the "Global War on Terror."

In the post 9/11 environment, four major events and policy shifts made a huge impact on the strategic dynamics in the South Asian region. First, in 2001–2002 India and Pakistan came close to a full-scale war following militant attacks on the Indian parliament building in New Delhi. This act of terrorism touched off a 10-month standoff that was again diffused with intense U.S. diplomatic intervention. Second, in 2004, the A.Q. Khan nuclear proliferation network was busted, which placed Pakistan in the international spotlight and irreparably damaged its reputation. Third, within a year of that dramatic episode, the U.S. offered an exceptional nuclear deal to India, allowing civilian nuclear trade, while retaining its military's program.

The deal was legislated into U.S. law in 2008 by the Hyde Act, which indirectly conferred de-facto recognition of a non-Nonproliferation Treaty (NPT) member to maintain and enhance its military nuclear program. The Hyde Act alienated Pakistan, which at the time, was a front line state in the war against terror in neighboring Afghanistan. Finally, in November 2008 another spectacular terrorist attack, this time in Mumbai, was traced back to Pakistan and wrecked any prospects of peace and stability in the region. This incident derailed five years of backdoor peace negotiations that had begun in 2003 between India and Pakistan.

These four events propelled Indo-Pakistani rivalry into a deeper mistrust. As the United States began to reprimand Pakistan both publicly and privately, security

6 For a comprehensive study of Kargil War see Peter R. Lavoy (ed.) (2009). *Asymmetric War in South Asia: The Causes and Consequence of the Kargil Conflict.* New York: Cambridge University Press.

anxieties in Pakistan reached new levels. In 2011, a series of incidents heightened Pakistan's sense of isolation and brought U.S.-Pakistan relations to an all-time low: the murder of Pakistani citizens by a U.S. intelligence contractor; a spectacular raid deep inside Pakistan that found the most-wanted man Osama bin Laden hiding in plain site; and a November border incident in which 24 Pakistani officers and men were killed in a mistaken U.S attack from Afghanistan.

A Race for Fissile Material Stocks

Pakistani nuclear bureaucracy is convinced that the fissile material gap with India is widening, even more so after the U.S.-India nuclear deal. It believes that India could divert its domestic uranium resources toward the military nuclear program while uranium fuel imported to the civilian component will compensate for the energy requirements.[7] Furthermore, Pakistan claims that India took the lead in fissile material production in 1974 while Pakistan faced nonproliferation obstacles and had to defy international efforts before it could acquire fissile material production capability. These perceptions, along with an evolving Indian military doctrine, have galvanized Pakistani fissile material production. Pakistan simply dismisses the notion that it maintains the fastest growing arsenals in the world. In reality, both India and Pakistan have stepped up fissile production capacities, in part, as psychoses of strategic competition but also to meet the fissile material requirements of the induction of new delivery systems in their respective arsenals.[8]

At the time of the 1998 tests, Pakistan had only one plutonium production reactor at *Khushab*, but as of 2015, three more are functioning and a fourth is soon to be commissioned. Pakistan is famously known for its prowess in producing highly enriched uranium (HEU) since the early 1980s. By now, Pakistan has expanded its HEU program with new-generation gas centrifuges (P-3 and P-4) that have been installed at *Kahuta* while also increasing the uranium hexafluoride production capacity at the chemical plant complex at *Dera Ghazi Khan*.[9] Open-sources estimate

7 Under the terms of the deal, India was required to separate its civil and military nuclear installations and submit the civil sites to IAEA safeguards. In return, India was granted permission to import nuclear fuel and technology despite being non-party to the NPT. This meant that India could now divert indigenously produced fuel to military uses.

8 According to the 2013 *SIPRI Yearbook*, the Indian arsenal comprises 90 to 110 warheads. Estimates in 2012 put India's highly enriched uranium (HEU) stockpile at 2.4 ± 0.9 metric tons, and its weapons-grade plutonium stockpile at 0.54 ± 0.18 metric tons. "Summary," in *SIPRI Yearbook 2013: Armaments, Disarmaments and International Security*. Stockholm: Stockholm International Peace Research Institute, 2013); "India," International Panel on Fissile Materials, 4 February 2013, available at http://www.fissilematerials.org/countries/india.html.

9 Author's interview with Dr. Javed Mirza, former head of Khan Research Laboratories (KRL) for the book *Eating Grass: The Making of the Pakistani Bomb* in June 2007.

that as of 2012, Pakistan produced 3 ± 1.2 metric tons of HEU and 0.15 ± 0.05 metric tons of plutonium—enough to produce one to two dozen weapons per year (International Panel on Fissile Materials, 2013). Other sources indicate that Pakistan is currently believed to have 90–110 warheads (Kimball and Collina, 2014).

With the fourth plutonium production reactor coming on line, Pakistani fissile production capacity will rise even further. Pakistan also has the option to produce composite or hybrid warheads with deuterium-tritium boosters. Because Pakistan does not enjoy the benefit of external uranium supplies—like India—the possibility exists for a crunch in uranium supplies caused by demand from both civil and military program requirements. This has driven increased exploration of uranium ores within Pakistan's territories. Pakistan's annual production of natural uranium is also likely to receive a boost once newly discovered uranium mines at *Shanawa* are operational.[10]

Given these developments and it sense of discrimination after the American nuclear deal to India, Islamabad opposes the commencement of international negotiations on a Fissile Material Cut-off Treaty (FMCT) and has instead demanded that negotiations include the accountability of the fissile stocks of all stakeholders—what it calls a Fissile Material Treaty (FMT). Pakistan contends that the FMCT fails to address the asymmetry of existing stocks and would freeze Pakistan's disadvantage vis-à-vis India.[11]

Quest for Strategic Triad

India has embarked on an ambitious strategic modernization program. Its strategic forces are developing capabilities to project power. Prime Minister Manmohan Singh inaugurated the first nuclear powered boat, the *Arihant*-class ballistic missile submarine (SSBN), in July 2009 at Visakhapatnam and declared that India was joining the elite club of nations equipped with nuclear submarines (Economic Times, 2009). This was followed by trials and tests of SLBMs such as the 700km-range K-15 *Sagarika*, whose development trials were said to have been completed in January 2013 (Defence News India, 2013). India also has plans to field the K-4 IRBM, which is designed to launch from the *Arihant*-class SSBN and carry a 1,000kg nuclear warhead. Each *Arihant*-class submarine would be able to c*arry*

10 Shanawa was expected to open in 2014, which will increase the annual capacity from approximately 36 to 54 metric tons. International Panel on Fissile Materials (2010). *Global Fissile Material Report 2010: Balancing the Books: Production and Stocks*, available at http://fissilematerials.org/library/gfmr10.pdf, p. 127.

11 For details, see "The South Asian Nuclear Balance: An Interview with Pakistani Ambassador to the CD Zamir Akram" *Arms Control Today*, December 2011, available at http://www.armscontrol.org/act/2011_12/Interview_With_Pakistani_Ambassador_to_the_CD_Zamir_Akram.

12 K-15 missiles, which would later be replaced by the 3,500km-range K-X. Three Arihant-class SSBNs are currently under construction—one at Visakhapatnam and two in Vadodara, India (Naval-Technology, 2013).

Another major program is the 5,000km *Agni-V,* a solid-fuelled and intercontinental ballistic missile (ICBM) that is slated to be operational by 2015. The Indian scientists have also claimed that *Agni-V* would be equipped with multiple independently targetable reentry vehicles (MIRVs) that are capable of penetrating enemy missile defenses (Pandit, 2012). In the spring of 2013, India conducted flight tests of the 290-km range, supersonic submarine-launched cruise missile (SLCM) *BrahMos*. Indian scientists declared that the system would be "ready for fitment on submarines in vertical launch configuration." (Press Trust of India, 2013). Along with these offensive long-range delivery systems, India is also actively developing ballistic missile defenses (BMD).

On the other side of the border, Pakistan's strategic force trajectory is towards shorter- and medium-range accuracies, as well as development of countervailing capabilities that complicate India's conventional force modernization plans, penetrate missile defenses, and force India to undertake unacceptable risks. Pakistan does not seek power projection but, rather, a regional stalemate. The current inventory comprises various short-range and medium-range ballistic and cruise missiles.[12] Pakistan is also developing a sea-based deterrent. In 2012, it formally inaugurated its Naval Strategic Forces Command. The sea-based delivery is reported to likely comprise Agosta-class submarines armed with nuclear-tipped cruise missiles.[13]

The aforementioned delivery systems will sooner or later get into a deployment cycle, especially once sea-based deterrent are employed on deterrence patrol in the Indian Ocean. Furthermore, India's pursuit of BMD for its command and commercial centers will putatively challenge the Pakistani nuclear deterrent capability in a future crisis. Pakistan is likely to embark on countervailing strategies, which will include both active and passive measures. This response may well include the increase of Pakistan's ballistic and cruise missile stocks and may even drive the development of MIRV capabilities to penetrate Indian defenses. The South Asian fissile and missile race could pose new challenges to the fragile stability in South Asia. Overlaid with these emerging capabilities are factors such as asymmetric

12 The types of missiles are the following: Hatf-1A Hatf-II (*Abdali*), Hatf-III (*Ghaznavi*), Hatf-IV (*Shaheen*-1, *Shaheen*-1A), Hatf-V (*Ghauri*), Hatf-VI (*Shaheen*-2), Hatf-VII (*Babur*), Hatf-VIII (*Ra'ad*), and Hatf-IX (*Nasr*). For further details see Feroz Hassan Khan (2012). *Op. Cit*., p. 250.

13 For details of Pakistan's strategic forces, see Hans M. Kristensen, and Robert S. Norris (2011). "Pakistan's Nuclear Forces, 2011". *Bulletin of the Atomic Scientists*, 67, no. 4, available at http://bos.sagepub.com/content/67/4/91.full.pdf+html.

geography, regional power structures, and evolving military doctrines in the region that complicates strategic stability.

Geographical Asymmetries and Evolving Military Doctrines

South Asia's strategic geography changed after the 1971 war when a united East-West Pakistan was dismembered. This was a watershed event in the history of the region as it constituted a second partition of the subcontinent and also changed the character of strategic rivalry in South Asia.[14] The results of the war cemented the Pakistani perception that India was bent on destroying Pakistan, and it gave credence to the belief that if presented with the opportunity, India would use its stronger conventional force to finish the task. The Indian demonstration of nuclear capability in 1974 then completely tilted the strategic imbalance in favor of India. This status was unacceptable to Pakistan. Not only would Islamabad subsequently doggedly pursue nuclear capability, it would also come to master asymmetric war—this latter convention occurring thanks to Pakistan's adjacent position to the Soviet invasion of Afghanistan and the response of Western-backed forces "jihad" against communism.

After the defeat of the '71 War and under duress, Pakistan signed a peace accord with India at Simla in 1972. This led to a decade's worth of relative peace between the two countries, but three events changed the regional dynamics and transformed security landscape by the early 1980s: the Islamic revolution in Iran; the Soviet invasion of Afghanistan; and the return of Prime minister Indira Gandhi—who had led India to victory in 1971 war—to political power in India.[15] The first two events allowed General Zia-ul- Haq's military's government to exploit Pakistan's geopolitical significance as the international community looked for partners to contain both crises.

As for Mrs. Gandhi's India, it began showcase a new political and military tact to deal with Pakistan that at the time was spearheading a global jihad against the Soviet Union in Afghanistan. New Delhi revived its strategic partnership with the Soviet Union, while the Indian military commenced a new strategic plan to engage Pakistan in a conventional war that would further weaken the smaller force and preemptively destroy Pakistan's nascent nuclear program. This thinking was com-

14 Pakistan was born with insecure and contested border and with two wings separated by thousand miles of India in between its two fronts with India and western porous border with Afghanistan, which created multiple fronts to defend. With East Pakistan now independent Bangladesh, Pakistan had only one front to defend with India.

15 Mrs. Indira Gandhi's political party was ousted from power in the 1977 election after she had declared a controversial emergency. For the first time in India, a different political party was set up, and it lasted until 1980.

monly referred to as the Sunderji doctrine.[16] But India's strategic aims could not materialize because of the regional and global circumstances, and by the end of the 1980s, a nuclear weapons program was budding in Pakistan.

The beginning of the 1990s saw the end of the Soviet Union, and as the dissolving Soviet Union retreated out of Afghanistan, the regional circumstances changed significantly. The early 90s also saw the Kashmir uprising at its peak with full support from Pakistan, and as U.S. interest in the region diminished with the Soviet retreat, both Pakistan and India came under nuclear sanctions and pressure to roll back their nuclear programs. By the end of the century, with both India and Pakistan conspicuously nuclear capable, the nature of war had sub-conventional or proxy dimensions intertwined with the conventional implications, all overlaid with nuclear deterrence.[17]

In theory, the advent of a nuclear deterrent ought to have created a semblance of strategic balance. But rather than bringing stability, a short intense war occurred in Kargil in the summer of 1999, dashing any prospect of peace. In 2001, a 10-month military stand-off tested the presence of the nuclear deterrent after alleged terrorists from two Pakistani-based organizations (*Lashkar-e-Taiba* and *Jaish-e-Mohammed*) attacked the Indian parliament building in New Delhi.[18]

The 2001-2002 crisis also tested India's military concept of limited war under the nuclear umbrella. The military mobilization concept originally conceived in the 1980s was somewhat redundant. India's political leadership ordered the army to mobilize and threaten Pakistan in retaliation of the attack on the Indian parliament, but its mobilization took several weeks to reach the border allowing Pakistan to

16 The architect of strategic thinking was India's army chief General K. Sundarji, who first reorganized India's army military and created such offensive force designed to fight a swift battle to sever Pakistan in two and destroy the country's nascent nuclear capability. The Indian army conducted several exercises in the mid-1980s to perfect this concept, one of which resulted in a major military crisis in 1986–1987 (Exercise *Brasstacks*). In the 1980s, Pakistan and the United States were jointly waging an asymmetric war in Afghanistan to defeat the Soviet occupation. Therefore, Pakistan was in a state of war at its western border when the Indian military initiated *Brasstacks*.

17 India and Pakistan have a history of waging asymmetric war against the other, which involves use of proxies or abetting secessionism since the two became independent countries. Since 1947-48, all wars fought between the two involved uses of sub-conventional elements wherein exploiting domestic instability combined with the conventional military invasion. Pakistan tried in 1965 but failed to attain objectives; India successfully exploited Pakistan's internal chaos in East Pakistan before invasion in the 1971 War. In the 1980s, Pakistan refined sub-conventional strategy after a decade of Soviet invasion of Afghanistan with the help of United States and other Western powers. Pakistan then applied its mastery when Kashmir secessionist uprising surfaced after the Soviets were defeated in Afghanistan

18 All militants that attacked the Indian parliament in December 2001 were killed in the fire-fight.

quickly counter-mobilize due to shorter lines of communication from peace garrisons to battlefield locations. The Indian military remained on the border for 10 months while political leadership could not decide on approving military operations across the border. By then, once again, Pakistan was playing a front-line role in America's war on terror in Afghanistan. Pakistan could neither be isolated diplomatically nor could Indian leadership risk a nuclear war. Pakistan showcased its nuclear prowess by flight-testing some of its nuclear-capable ballistic missiles. The new realities had outmoded the erstwhile Sunderji doctrine. India's military planners now began to contemplate new ways of fighting a limited war against nuclear-armed Pakistan.

The new Indian approach, dubbed as the military doctrine of "Cold Start," proposed both rapid mobilizations to undercut Pakistani mobilization and limited operation in order to keep below the Pakistani nuclear threshold. The doctrine's end-state is war termination before the international community could intervene. India's proactive military operational concept envisaged heavy use of firepower combined with air operations, ground operations, and a naval blockade of the solitary Pakistani port of Karachi. Over a decade since the 2002 standoff, the Indian army has been reorganizing its army formations into division-sized forces known as Integrated Battle Groups (IBGs). These IBGs are purpose built to strike across the international border at short notice. The IBGs would also create space for follow-on forces to undertake limited exploitation via shallow maneuver, while inflicting maximum destruction of Pakistani military. Indian planners assume that speed of operations and a shallow ingress will not allow Pakistan to bring its nuclear deterrence into play.

Pakistan then commenced a refinement of its own military doctrines to respond to India's innovation. Pakistan reinforced its garrisons at vulnerable locations, created quick reaction forces that could rapidly deploy, and improved and constructed a series of obstacles to delay and channelize India forces. In 2011, the Pakistan army released a doctrine called "Comprehensive Response" that elaborated its predicament in the following words: "With the possibility of Pakistan being drawn into a war at very short notice, all formations organize their administrative and routine activities in a manner that effective combat potential can be generated within 24 to 48 hours from the corps to unit level and two to three days at the Army level." (Pakistan Army Doctrine and Evaluation Directorate, 2011: 43-44). In addition to decreasing its own mobilization timelines, Pakistan could also launch a tactical offensive to take its battle into Indian territory either preemptively or as riposte to Indian attack.

While both India and Pakistan refined their conventional doctrines, Pakistani strategic planners were working to integrate their conventional force plans with nuclear force plans. Pakistan's predicament was its vulnerability to India by a geographical handicap of shallow depth. Additionally, Pakistan's main lines of communication

were close and vulnerable to an Indian offensive, a weakness that the original Indian doctrine was slated to exploit. But by end of the first decade of the twenty-first century Pakistan was facing multiple insurgencies of its own, especially on its Western borders, where its troops were drawn into counterinsurgency operations in the tribal areas. Pakistani defenses against India were weakening as forces from the Indian border and Line of Control in Kashmir were drawn to the border with Afghanistan. Pakistan then sought to find answer to its strategic predicament. One option was to integrate nuclear weapons into conventional war plans.

In the spring of 2011, still facing inherent geographic handicaps in a conflict with India, Pakistani military planners found an answer to the India's Cold Start doctrines. In April 2011, Pakistan tested the *Hatf-IX/Nasr*, a 60km-range, road-mobile short-range ballistic missile (SRBM), also dubbed as Nasr. The press statement accompanying the introduction of this new system by Pakistan's Inter-Services Public Relations (ISPR) directorate stated that *Nasr* "carries nuclear warheads of appropriate yield with high accuracy, shoot and scoot attributes."[19]

Pakistan had made it clear that India's Cold Start doctrine would result into meeting a nuclear weapon in the battlefield and that the onus of lowering of the nuclear threshold rests with the India. In theory, the introduction of tactical nuclear weapon (TNW) would deny India the space to prosecute a conventional war under the nuclear overhang. India then introduced its own SRBM, *Prahaar* with a test that followed within months; however, India did not declare its system as explicitly carried nuclear warheads but kept it ambiguous. Later, its scientific organizations declared that *Prahaar* was to replace the aging *Privthi* missiles that were first introduced in the 1980s. *Prahaar* has 50–150km-striking range and is likely having dual-use mission given India's claims to have tested compact warhead designs (Raghuvanshi, 2011).

The induction of battlefield nuclear weapons in South Asia opened up the litany of questions of the Cold War era whose clear answers were never found. Some five or six decades back when weapons as Davy Crocket and nuclear artillery were deployed in the mix of conventional forces in the East-West conflict, NATO forces weighed the deterrent effect of such weapons against the operational and logistic dilemma they faced. The appearance of short-range nuclear capable delivery systems in the battlefield poses imminent threats inducing preemptive strikes from the adversary. Second, TNW forward deployment in the proximity of conventional defenses complicates articulation of command and control (C2). Conversely, an assertive C2 makes the deployed weapon relatively safe from accidental use but less battle effective and more vulnerable, once out of the peacetime storage. More

19 Pakistan Inter-Services Public Relations Directorate, Press Release No. PR94/2011-ISPR, April 19, 2011, available at https://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=1721.

importantly, the vulnerability of the weapons in the field warrants extra security measures to protect them, which then compromises the requirements of camouflage and concealment. These are some of the deployment and employment challenges of operational integration of conventional and nuclear forces, especially with the induction of short-range nuclear capable system into the mix.

Doctrinal Asymmetry

India and Pakistan adapted differing nuclear doctrine. Unlike Pakistan, India has an official nuclear doctrine of no first use (NFU). India's NFU has several qualifiers such as its right to retaliate massively if Indian forces were attacked with nuclear weapons anywhere -whether its own or on foreign territory. India would also retaliate with nuclear weapons if chemical, or biological weapons were used against Indian forces. Pakistan decided to showcase its command and control apparatus and decided it was not necessary to declare a doctrine. Pakistani official position is to keep the right of first use open. Islamabad does not believe in the credibility of India's massive retaliation threat against nuclear attack. In addition, Pakistan's nuclear doctrine is deliberately ambiguous and it's belief that the more imprecise nuclear thresholds are the greater are the chances of complicating and paralyzing Indian conventional military plans.

Furthermore, the closest Pakistan has come to declaring the parameters of its nuclear use doctrine was in an interview in which SPD Director-General Khalid Kidwai declared four general conditions that would contribute to Pakistani decision for nuclear use. Pakistani official declared that Pakistan would consider use of nuclear weapons, if India: (1) conquers a large portion of territory; (2) destroys large portions of Pakistani armed forces; (3) strangles the economy; or (4) threatens regime survival through domestic destabilization.[20] From the Pakistani officials statements it can be clearly discerned that the foremost aim of Pakistani nuclear doctrine is to deter a conventional force attack against Pakistan and that it would retain all options - including use of nuclear weapons as a last resort- to ensure its national integrity and survival.

This doctrinal mismatch between India and Pakistan has potential risks. India's assumption is that should it start a limited war by sending IBGs across the international border, Pakistan would be deterred for fear of punishment because in the event of Pakistani nuclear use India would "massively retaliate" - thus Pakistan would be unable to think of employing nuclear weapons. In contrast, the Pakistanis dismiss the credibility of India's massive retaliation policy. Pakistan believes India

20 Khalid Kidwai (Pakistan's former Director-General of the Strategic Plans Division), interview by the Landau Network-Centro Volta, February 2002, available at http://www.pugwash.org/september11/pakistan-nuclear.htm.

would not be able to consider such a disproportionate response against low yield tactical strikes. After all, India and Pakistan lie on the same subcontinent and both have the ability to retain enough survivable weapons to retaliate. As both sides believe in second strikes capacities, neither side feels it has reasons to back away. With increasing arsenals and modernizations of systems, neither country is ready to give up or back down.

The Drivers of Competition

At the root of this nuclear and doctrinal competition is mutual mistrust. Several factors have contributed to such an outcome. Pakistan's strategic anxieties compounded when the busting of A. Q. Khan network lead to international scorn. To add insult to this injury was the increased U.S.-India strategic partnership that included an exceptional nuclear deal. At the regional level, there was virtually no progress in any meaningful arms control and confidence-building measures that could bring in some semblance of peace and security. India found no incentive to deal to cut any slack for Pakistan. While series of terror attacks continued in both countries, attacks in India that could be traced back to Pakistan became a sore sticking point for India to keep up pressure on Pakistan. India continues to demand that Pakistan dismantle terror networks and bring to justice all perpetrators—especially the ones involved in the 2008 Mumbai terror attack. Pakistani is suffering itself as terror attacks with impunity continues in the country at the time of this writing and the judicial system in Pakistan cannot provide speedy justice in the absence of full cooperation and evidence from India. With the recent change of government in India that has enabled a right-wing Hindu party in power, Pakistanis have little hope that any step they could take would satisfy India.[21] The regional strategic environment in the end remains politically charged and ever prone to sudden crisis.

The Nuclear Deal

Pakistan was placed under international spotlight and infamy when it's chief scientist, Dr. Abdul Qadeer Khan, was found in the center of the international proliferation ring that was busted in the Fall of 2003. A. Q. Khan was the head of the Pakistani centrifuge program, and he admitted to his role in the illicit network that provided nuclear technology to several countries, including Iran, Libya, and North

21 India cancelled peace talks with Pakistan last summer (2014) on the grounds that Pakistan had carried out dialogue with Kashmiri leaders prior to the talks. Since then there is no dialogue at any level; meanwhile, tensions on the Kashmir Line of Control have increased and often turn violent, especially when Pakistani military is conducting operations on the Western frontiers against Taliban.

Korea. Pakistan has never recovered from the fallout of the A. Q. Khan saga. For over a decade now, Pakistan has persistently denied any official complicity and has tried hard to overcome the scarlet letter of the A. Q. Khan proliferation network. Pakistan has willing shared its investigations with international community though it did not allow access to outside interrogation of A. Q. Khan, which it is unlikely to grant given that he is seen as national hero and that he still holds classified information about Pakistan's nuclear program. Despite Pakistani help to dismantle the network and having taken significant steps to tighten its nuclear security regime, it image remains tainted of the baggage of the network.[22]

Pakistan's struggle to recover from the fallout of the A. Q. Khan debacle only compounded when its archrival and fellow proliferator India was showered with an exceptional and lucrative nuclear deal. Just a year after the unfolding of the A. Q. Khan network, President George Bush offered India a nuclear deal with the United States. Three years later, this deal was legislated in Washington as the Hyde Act 2008. India was granted a waiver from the export controls of the Nuclear Supplier's Group (NSG), which permitted India to freely import nuclear fuel and technology for civilian purposes, while freeing up its domestic uranium resources for India's military's program. As for its terms, India agreed to open its civilian sites to inspection from International Atomic Energy Agency (IAEA) but not its military sites that are permitted to operate. This controversial deal implied a de facto recognition of non-NPT member.

India was seemingly rewarded because its image of external proliferation was clean, but in reality the deal was aimed at providing significant nuclear business for United States and other Western suppliers.[23] India's status as an emerging power with democratic credentials and its rivalry with China are long-term reasons for this special treatment. The consequence of this deal was alienation of Pakistan and China and setting up the precedence and added incentive for further cooperation between the two. Pakistani calculations of India's fissile stocks were significantly altered. Islamabad contends it is now compelled to step up production of fissile material and now is opposed to the negotiations of a Fissile Material Cutoff Treaty. Pakistan wants a similar deal what it calls "mainstreaming" Pakistan into the nuclear world order, but the United States has persistently refused to oblige Islamabad's wishes.

As Indian diplomacy gears up towards getting membership in the Nuclear Suppliers Group NSG, Pakistani frustration and anger is on the rise. Pakistan has made it

22 See the latest National Threat Initiative (NTI) Index of 2014.

23 Proponents of the U.S.-India nuclear deal cite India's "clean" nonproliferation record but deliberately ignore or gloss over India's abuse of Atoms for Peace that resulted in the 1974 nuclear test and set the chain of proliferation.

clear the unacceptability of such a position. Pakistan believes this move will kill Pakistani chances of becoming member of the club. It is hoping China and some other members would not allow this discrimination. Additionally, the Pakistanis claim that they have paid the penalty for the A. Q. Khan folly and it is time to move forward. They are asking for criteria-based approach to membership in export control regimes rather than providing membership based on political favoritism. Western disregard of Pakistani sense of isolationism is counterproductive in strengthening global non-proliferation regime. The consequence of this policy is that Pakistan, with advanced nuclear capabilities, is left out of the nuclear system. Furthermore, as it increases its arsenals, there is no regional or local architecture that dampens the competition because India has no incentive to engage in any CBMs or restraint talks with Pakistan.

Absence of Meaningful CBMs or Arms Control Architecture

After the nuclear tests in 1998, there were concerted efforts to bring some restraint agreement in the region. United States spearheaded an effort in 1998-99 but that effort failed to engage India into strategic restraint agreement. India was dismissive because it believes China is India's nemesis and India is global player and would not be tied to the region. Nevertheless, both countries found common grounds on at least one promising political framework that was signed by India and Pakistan in Lahore in 1999 known as the Lahore Agreement. The Lahore Declaration of February 1999, for example, was a celebrated bilateral agreement in which India and Pakistan promised to resolve disputes peacefully in good faith, improve bilateral dialogue, and avoid nuclear provocation; however, three months later, Pakistani soldiers snuck across the line of control in Kashmir and occupied abandoned Indian posts, sparking the Kargil War. Several attempts to revive that spirit were made but have never reached fruition.

By and large, South Asia has a long history of developing confidence-building measures but was always shy of serious arms control issues. All peace related dialogue has remained in a state of limbo since the 2008 Mumbai attack. There lingers a persistent belief that CBMs are ineffectual for easing crisis and dissuading conflict. India and Pakistan do not have any agreement to limit conventional force expansion, nor is there any desire to limit delivery system development or fissile material production.

Conclusion

South Asia continues to defy the global trends and their competition is a major challenge for international security. Some 40 years back when the nonproliferation regime was in nascent stages, both countries interpreted the global norm as a challenge to national security with India calling it global nuclear apartheid. Now,

India and Pakistan are seen in different leagues. Their respective nuclear programs and motivations are at variance, much more intense than anytime in history and the fundamentals of their motivations are much different than when the two commenced their nuclear journey.

While nuclear arsenals and delivery means are increasing with innovative doctrines replacing redundant ones, the India-Pakistani relations remain tense and conflicts unresolved. The intense involvement of the United States after 9/11 is shifting away from South Asia towards rebalancing to the Asia-Pacific and other global contingencies. This development will have a cascading effect on South Asia. China will continue to remain the focus, and it is already investing heavily in its strategic weapons system development, including modernizing its missile systems and naval outreach. Moreover, India is reacting to China with its military investments, which has an impact on Pakistan. Facing multiple threats from within and lacking resources to match India's military buildup, Pakistan is relying heavily on nuclear weapons. The security dilemma on the subcontinent continues to intensify. This trend could only reverse if and when visionary leadership emerges that could see the dangers of this security dilemma.

Seemingly there is no initiative to ease Indo-Pakistani strategic conundrum. The plethora of CBMs is merely on the books, but there is no robust arrangement for bilateral strategic restraint. The author has proposed several arms control proposals in recent publications.[24] One such opportunity for rudimentary arms control measure still exists if and when Indians and Pakistanis would come to the bargaining table. Pakistan and India can decommission their aging and obsolete SRBMs (the *Hatf-I* and *Privthi-I*, respectively). If both could jointly agree to disassemble these missiles in a transparent manner, this could constitute as first baby step of inspiring new level of mutual confidence and serve as a harbinger for future arms control in the region.[25]

Some hopes were pinned on New Delhi and Islamabad, but rather sadly, the new leadership in India and Pakistan has shown little or no urgency to reach out to the

24 See for example Feroz Hassan Khan (2012). "Prospects for Indian and Pakistani Arms Control and Confidence Building Measures" in Henry D. Sokolski (ed.), *The Next Arms Race*. Carlisle Barracks, PA: Strategic Studies Institute, pp. 357- 386. Also Feroz Hassan Khan (2013). "Strategic Restraint Regime 2.0" in Michael Krepon and Julia Thompson (eds.), *Deterrence Stability and Escalation Control in South Asia*. Washington, DC.: Henry L. Stimson Center, pp. 161–174.

25 For a detailed analysis, see Feroz Khan and Gurmeet Kanwal (2011). "Building Trust in South Asia through Cooperative Retirement of Obsolescent Missiles". Centre for Land Warfare Studies, September 4, available at http://www.claws.in/Building-Trust-in-South-Asia-through-Cooperative-Retirement-of-Obsolescent-Missiles-Gurmeet-Kanwal.html. Also see Zachary Davis (2013). "The Yin and Yang of Strategic Transparency" in Michael Krepon and Julia Thompson (eds.), *Op. Cit.*, pp. 175–85.

other. Far from political will or desire to take risks, there is no visible diplomatic overture at the time of this writing. The international community has a huge stake in bringing the destabilizing trends in nuclear-armed region and in the construction of peace and security architecture that could bring conflict resolution between these nuclear-armed rivals.

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